Test Report
Consistency test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	1-May-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3	Trial 4	Trial 4
1	Weight of Cement	400	400	400	400	400
2	Percentage of water added (%)	27	28.5	29.5	30	31
3	Weight of Water (gm)	108	114	118	120	124
4	Initial Reading of Plunger (mm)	40	40	40	40	40
5	Difference (mm)	19	16	11	6.5	5.5

Results: Standard Consistency of Cement: 30.50%

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Test Report
Fineness test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At site
Material	Cement
Sample No	1
Date	1-May-2018

Sl. No.	Determination	Trial 1	Trial 2
1	Weight of Cement before sieve (gm)	100	100
2	Weight of residue retained on 90um sieve (gm)	5.1	4.3
3	Percentage retained (%)	5.1	4.3
4	Average Percentage retained (%)	4.7	

Results: Residue of cement is: 4.7%

Comments: Maximum allowable residue by mass for ordinary portlad cement is 10%

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited

Test Report
Soundness test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 4031 (Part 3) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	1-May-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3
1	Initial Distance between the indicator points of Lechatelier mould	11	10	11
2	Final Distance between the indicator points of Lechatelier mould	16	16	17
3	Difference or expansion	5	6	6
4	Average Differences or Expansion in mm	5.67		

Results: Difference in Expansion of Cement: 5.67mm

Comments: Maximum allowable Expansion of cement is 10mm.

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

MECADEZ
Insight Makes It Happen

MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED
PROJECT MANAGEMENT & CONSULTANCY SERVICES

Test Report
Compressive strength test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Cement
Sample No	1
Date	11-May-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	7	-	0.84	70.6x70.6 x70.6	2387.1	183	4984.36	36.71	36.82
2	43	7	-	0.85	70.6x70.6 x70.6	2415.5	184	4984.36	36.92	

Results: 7-days Compressive strength of cement is 36.92N/mm^2

Comments: 7-days Compressive strength of cement should not be less than 33 N/mm^2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited

Test Report
Compressive strength test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Lab No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Cement
Sample No	1
Date	1-Jun-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	28	-	0.81	70.6x70.6 x70.6	2287.0	230	4984.36	46.14	46.45
2	43	28	-	0.84	70.6x70.6 x70.6	2316	233	4984.36	46.75	

Results: 28-days Compressive strength of cement is 45.45N/mm^2

Comments: 28-days Compressive strength of cement should not be less than 43 N/mm^2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited MECADEZ

Test Report
Gradation test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	1
Date	1-May-2018

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification for PQC
2	4.75 mm	14	7.00	7.00	93.00	90-100	
3	2.36 mm	16	8.00	15.00	85.00	75-100	
4	1.18 mm	15	7.50	22.50	77.50	55-90	
5	600 µ	42	21.00	43.50	56.50	35-59	
6	300 µ	56	28.00	71.50	28.50	8-30	
7	150 µ	42	21.00	92.50	7.50	0-10	

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited

Test Report
Gradation test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	1-May-2018

Weight of Sample: **4000 gms**

Sl. No	I.S. Sieve size	Weight Retained (gm)	% of weight Retained (%)	Cumulative Percentage of	Passing		Remarks
					Test Result	Gradation Limits as per	
1	31.50	0	0.0	0.0	100	100	
2	26.50	493	12.33	12.33	87.68	85-95	
3	19.00	323	8.075	20.4	79.60	68-88	
4	9.50	637	15.93	36.33	63.68	45-65	
5	4.75	424	10.6	46.93	53.08	30-55	
6	0.60	950	23.75	70.68	29.33	8-30	
7	0.15	853	21.33	92.00	8.00	5-15	
8	0.08	225	5.63	97.63	2.37	0-5	

Note:

(i) The results indicated above are based on the tests carried out on the sample at site.

(ii) The results relate only to the items tested.

(iii) This test report should not be reproduced except in full, without written approval of this laboratory.

(iv) Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Test Report
Water absorption test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	1-May-2018

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of SSD sample	W_1 g	761	763	
2	Aggregates Immersed in	W_2g	2024	2022	
3	Weight of Saturated Aggregate in water	W_sg = W_2- W_1	1263	1259	
4	dry aggregate in Air	W_3 g	2059	2047	
5	Volume of the Aggregate	W_3- W_s	796	788	
6	Aggregate	W_4g	2020	2018	
7	Specific Gravity	W_4/(W_3- W_s)	2.54	2.56	2.55
8	Apparent Specific Gravity	W_4/(W_4- W_s)	2.67	2.66	2.66
9	Water Absorption	(W_4- W_3)*100/ W_4	1.93	1.44	1.69

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Test Report
Impact test

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s KRIDL
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Coarse aggregates
Sample No	1
Date	1-May-2018

SL No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1302	1301
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	342	341
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	83	80
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	259	261
6	Aggregate Impact Value (w4 / w3)x100	%	24.27	23.46
7	Specified Limit	%	45.00	

Results: Average Aggregate Impact Value: **23.86** %

Note:

1. The results indicated above are based on the tests carried out on the sample at site.
2. The results relate only to the items tested.
3. This test report should not be reproduced except in full, without written approval of the laboratory.
4. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited

Test Report
Concrete Compresive strength

Project Name	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
Mix Type	M25 Concrete for Raft
Contractor	M/s KRIDL
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	Concrete
Sample No	1
Date	24-Jun-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	7	6.79	150*150*150	2011.85	320	0.0225	14.22	14.00	14.13
2	20	7	6.83	150*150*150	2023.70	310	0.0225	13.78		
3	20	7	6.69	150*150*150	1981.93	315	0.0225	14.00		
4	20	7	7.01	150*150*150	2077.04	318	0.0225	14.13	14.27	
5	20	7	6.82	150*150*150	2020.74	325	0.0225	14.44		
6	20	7	6.79	150*150*150	2012.15	320	0.0225	14.22		

Results: 7-days Compressive strength of cement is 14.13 N/mm2

Note:

1. The results indicated above are based on the tests carried out on the sample at site.
2. The results relate only to the items tested.
3. This test report should not be reproduced except in full, without written approval of this laboratory.
4. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

MECADEZ CORE TECHNOLOGIES PRIVATE LIMIT

PROJECT MANAGEMENT & CONSULTANCYSERVI

Test Report
Concrete Compresive strength

	Improvements to roads and drains from Baglur Main Road to Shivapura in Ward No.05
	Executive Engineer, Project Division Yalahanka
	MCTPL/BBMP/Project-YNK/2017-2018/QR/03
	M25 Concrete for Raft
	M/s KRIDL
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	1
	15-Jul-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	28	7.95	150*150*150	2355.56	540.00	0.02	24.00	24.03	24.00
	20	28	7.83	150*150*150	2320.00	537.00	0.02	23.87		
	20	28	7.80	150*150*150	2311.11	545.00	0.02	24.22		
	20	28	7.82	150*150*150	2317.04	538.00	0.02	23.91	23.97	
	20	28	7.93	150*150*150	2349.63	537.00	0.02	23.87		
	20	28	7.85	150*150*150	2325.93	543.00	0.02	24.13		

28-days Compressive strength of cement is 24.00 N/mm2

1. The results indicated above are based on the tests carried out on the sample at site.
2. The results relate only to the items tested.
3. This test report should not be reproduced except in full, without written approval of this laboratory.
4. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

MECADEZ
Insight Makes It Happen

MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED
PROJECT MANAGEMENT & CONSULTANCY SERVICES

Test Report
Concrete Compresive strength

	Improvements to road, drain , footpath and Asphalting to 6-selected Arterial, Sub-Arterial Roads and orther Connecting roads in Mahadevapura Zone-GOK 2016-17-N-RI-MP-Package-04
	Executive Engineer, Road Infrastructure-Mahadevpura Division
	MCTPL/BBMP/RI -Mahadevpura/PMC/2017-2018/QR/P-4/1
	M-25 Concrete for wall
	S Satish #208, 2nd Cross Nagasandra, Basavanagudi Bengaluru-28
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	1
	22-Jun-2018

Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
20	7	6.79	150*150*150	2011.85	320	0.0225	14.22	14.00	14.13
20	7	6.83	150*150*150	2023.70	310	0.0225	13.78		
20	7	6.69	150*150*150	1981.93	315	0.0225	14.00		
20	7	7.01	150*150*150	2077.04	318	0.0225	14.13	14.27	
20	7	6.82	150*150*150	2020.74	325	0.0225	14.44		
20	7	6.79	150*150*150	2012.15	320	0.0225	14.22		

7-days Compressive strength of cement is 14.13 N/mm2

1. The results indicated above are based on the tests carried out on the sample at site.
2. The results relate only to the items tested.
3. This test report should not be reproduced except in full, without written approval of this laboratory.
4. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Mecadez Core Technologies Private Limited

MECADEZ CORE TECHNOLOGIES PRIVATE LIMIT
PROJECT MANAGEMENT & CONSULTANCY SERVI

Test Report
Concrete Compresive strength

	Improvements to road, drain , footpath and Asphalting to 6-selected Arterial, Sub-Arterial Roads and orther Connecting roads in Mahadevpura Zone-GOK 2016-17-N-RI-MP-Package-04
	Executive Engineer, Road Infrastructure-Mahadevpura Division
	MCTPL/BBMP/RI -Mahadevpura/PMC/2017-2018/QR/P-4/1
	M-25 Concrete for wall
	S Satish #208, 2nd Cross Nagasandra, Basavanagudi Bengaluru-28
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	2
	22-Jun-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	7	6.97	150*150*150	2065.19	345	0.0225	15.33	14.86	15.05
	20	7	6.96	150*150*150	2062.22	326	0.0225	14.49		
	20	7	6.82	150*150*150	2020.74	332	0.0225	14.76		
	20	7	7.16	150*150*150	2121.48	342	0.0225	15.20	15.24	
	20	7	6.84	150*150*150	2026.67	345	0.0225	15.33		
	20	7	6.78	150*150*150	2008.89	342	0.0225	15.20		

7-days Compressive strength of cement is 15.05 N/mm2

The results indicated above are based on the tests carried out on the sample at site.

The results relate only to the items tested.

The test report should not be reproduced except in full, without written approval of this laboratory.

Any query regarding the report must be reported immediately.

Core Technologies Private Limited

Authorised Signatory

MECADEZ Core Technologies Private Limited

MECADEZ CORE TECHNOLOGIES PRIVATE LIMI
PROJECT MANAGEMENT & CONSULTANCYSERVI

Test Report
Concrete Compresive strength

	Improvements to road, drain , footpath and Asphalting to 6-selected Arterial, Sub-Arterial Roads and orther Connecting roads in Mahadevapura Zone-GOK 2016-17-N-RI-MP-Package-04
	Executive Engineer, Road Infrastructure-Mahadevpura Division
	MCTPL/BBMP/RI -Mahadevpura/PMC/2017-2018/QR/P-4/1
	M-25 Concrete for wall
	S Satish #208, 2nd Cross Nagasandra, Basavanagudi Bengaluru-28
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	1
	13-Jul-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	28	7.96	150*150*150	2358.52	545.00	0.02	24.22	24.07	24.09
	20	28	7.85	150*150*150	2325.93	540.00	0.02	24.00		
	20	28	7.79	150*150*150	2308.15	540.00	0.02	24.00		
	20	28	7.82	150*150*150	2317.04	547.00	0.02	24.31	24.10	
	20	28	7.91	150*150*150	2343.70	535.00	0.02	23.78		
	20	28	7.84	150*150*150	2322.96	545.00	0.02	24.22		

28-days Compressive strength of cement is 24.09 N/mm2

The results indicated above are based on the tests carried out on the sample at site.
The results relate only to the items tested.
This test report should not be reproduced except in full, without written approval of this laboratory.
Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

MECADEZ
Insight Makes It Happen

MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED
PROJECT MANAGEMENT & CONSULTANCYSERVICES

Test Report
Concrete Compresive strength

	Improvements to road, drain , footpath and Asphalting to 6-selected Arterial, Sub-Arterial Roads and orther Connecting roads in Mahadevapura Zone-GOK 2016-17-N-RI-MP-Package-04
	Executive Engineer, Road Infrastructure-Mahadevpura Division
	MCTPL/BBMP/RI -Mahadevpura/PMC/2017-2018/QR/P-4/1
	M-25 Concrete for wall
	S Satish #208, 2nd Cross Nagasandra, Basavanagudi Bengaluru-28
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	2
	03-Jul-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	28	8.06	150*150*150	2388.15	547.00	0.0225	24.31	24.16	24.18
	20	28	7.95	150*150*150	2355.56	542.00	0.0225	24.09		
	20	28	7.89	150*150*150	2337.78	542.00	0.0225	24.09		
	20	28	7.92	150*150*150	2346.67	549.00	0.0225	24.40	24.19	
	20	28	8.01	150*150*150	2373.33	537.00	0.0225	23.87		
	20	28	7.94	150*150*150	2352.59	547.00	0.0225	24.31		

28-days Compressive strength of cement is 24.18 N/mm2

Note :

1. The results indicated above are based on the tests carried out on the sample at site.
2. The results relate only to the items tested.
3. The test report should not be reproduced except in full, without written approval of this laboratory.
4. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature